

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



10/533724

(43) International Publication Date  
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number  
WO 2004/042724 A1

(51) International Patent Classification<sup>7</sup>: G11B 20/12,  
27/32

(21) International Application Number:  
PCT/IB2003/004560

(22) International Filing Date: 14 October 2003 (14.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02079654.6 7 November 2002 (07.11.2002) EP

(71) Applicant (for all designated States except US): KONIN-  
KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];  
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): FONTIJN, Wilhel-  
mus, F., J. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA  
Eindhoven (NL).

(74) Agent: DEGUELLE, Wilhelmus, H., G.; Philips Intel-  
lectual Property & Standards, Prof. Holstlaan 6, NL-5656  
AA Eindhoven (NL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,

KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,  
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

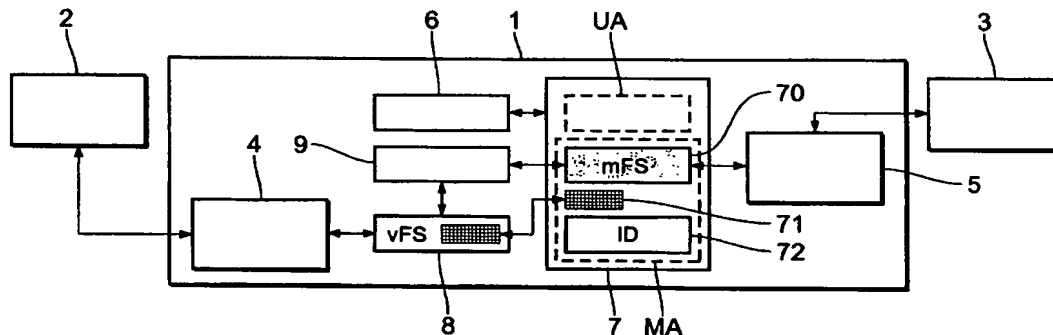
(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted  
a patent (Rule 4.17(ii)) for the following designations AE,  
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES,  
FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH,  
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO  
patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG,  
ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU,  
TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE,  
DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT,  
RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

[Continued on next page]

(54) Title: RECORD CARRIER HAVING A MAIN FILE SYSTEM AREA AND A VIRTUAL FILE SYSTEM AREA



(57) Abstract: The present invention relates to a recordable record carrier having a user area (UA) for storing user data and a man-  
agement area (MA) for storing management data. The invention further relates to a recording apparatus for recording information  
on such a record carrier and a corresponding recording method. In some applications it is useful to translate the main file system  
into an alternative virtual file system. To reduce the mount times and power consumption needed for reconstruction of the virtual  
file system, it is proposed that the management area (MA) comprises a main file system area (70) for storing main file system data  
(mFS), a virtual file system area (71) for storing virtual file system data (vFS) in a raw format, and an indicator area (72) for storing  
an indicator (ID) indicating whether the main system data (mFS) and the virtual file system data (vFS) are mutually consistent. Only  
if the indicator (ID) indicates an inconsistency does the virtual file system data (vFS) need to be reconstructed from the main file  
system data (mFS) when the virtual file system data (vFS) is required by an application. Otherwise, the virtual file system data (vFS)  
can be directly retrieved from the record carrier without reconstruction.

WO 2004/042724 A1